

FIG. 1

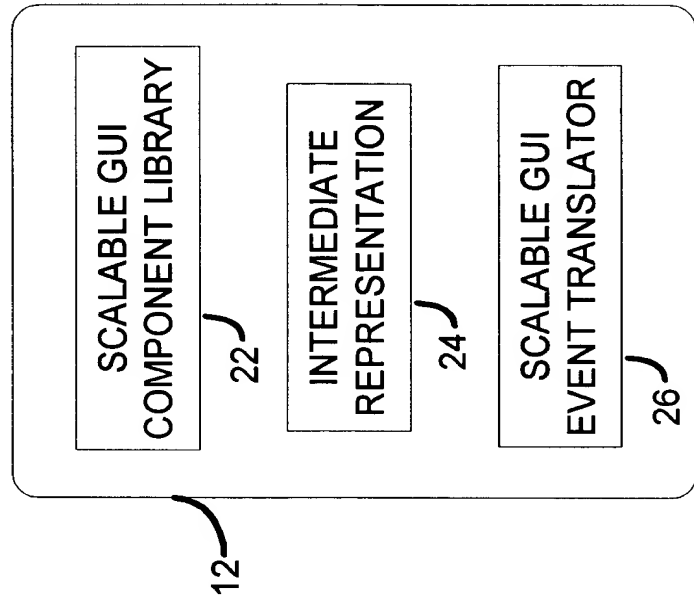


FIG. 2

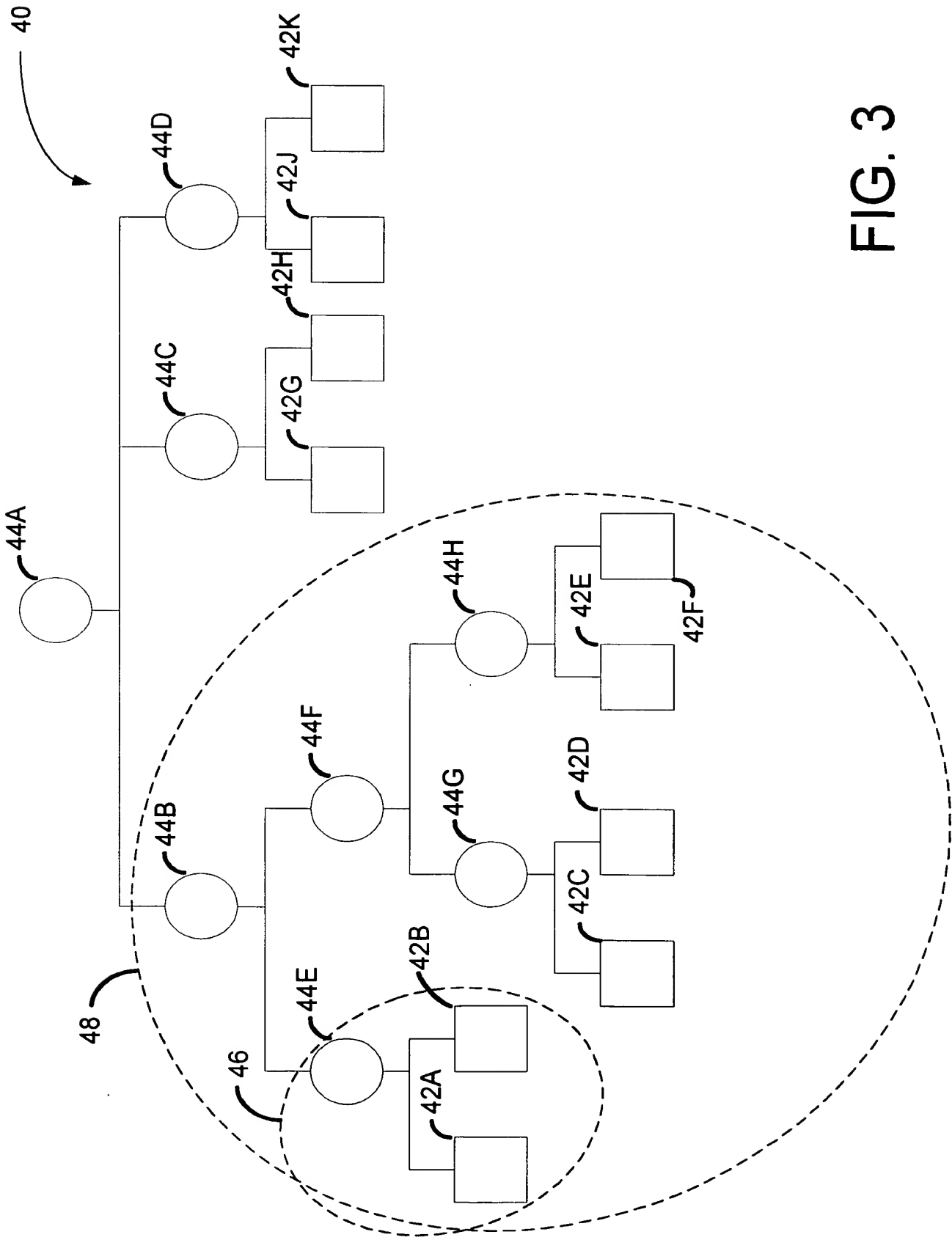


FIG. 3

FIG. 4

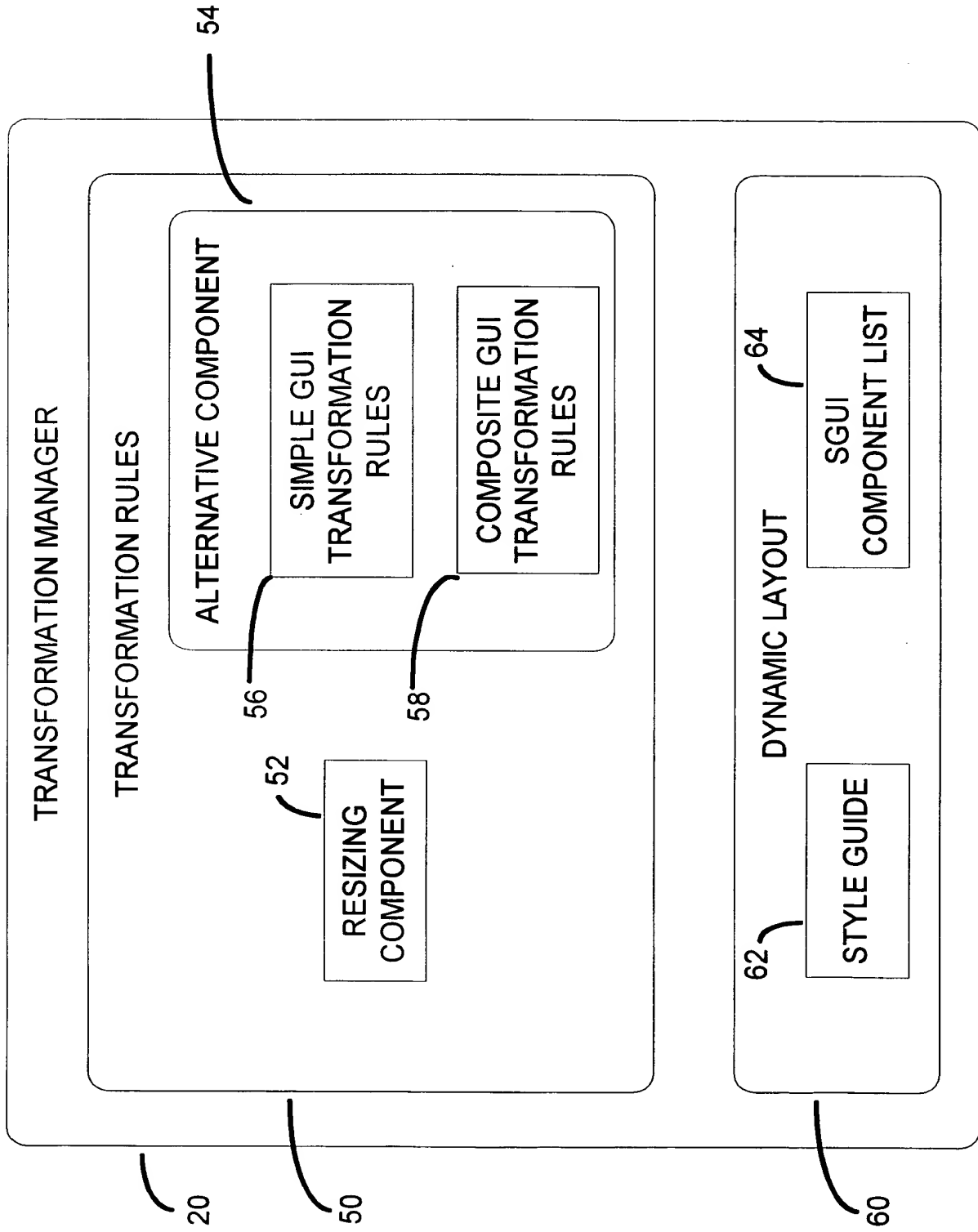


FIG. 4

FIG. 5

70

PRIORITY:

72

PRIORITY:

74

HIGH

FIG. 5

76

ADD SHOPPING ITEM:

ITEM NAME:

BRAND NAME:

QUANTITY:

EXPECTED PRICE/UNIT:

PRIORITY:

PREFERENCE STORE:

80

80

80

80

82

84

HIGH

TARGET

90

FIG. 6

78

ADD SHOPPING ITEM:

PROPERTIES

ITEM NAME

BRAND NAME

QUANTITY

86

88

VALUE

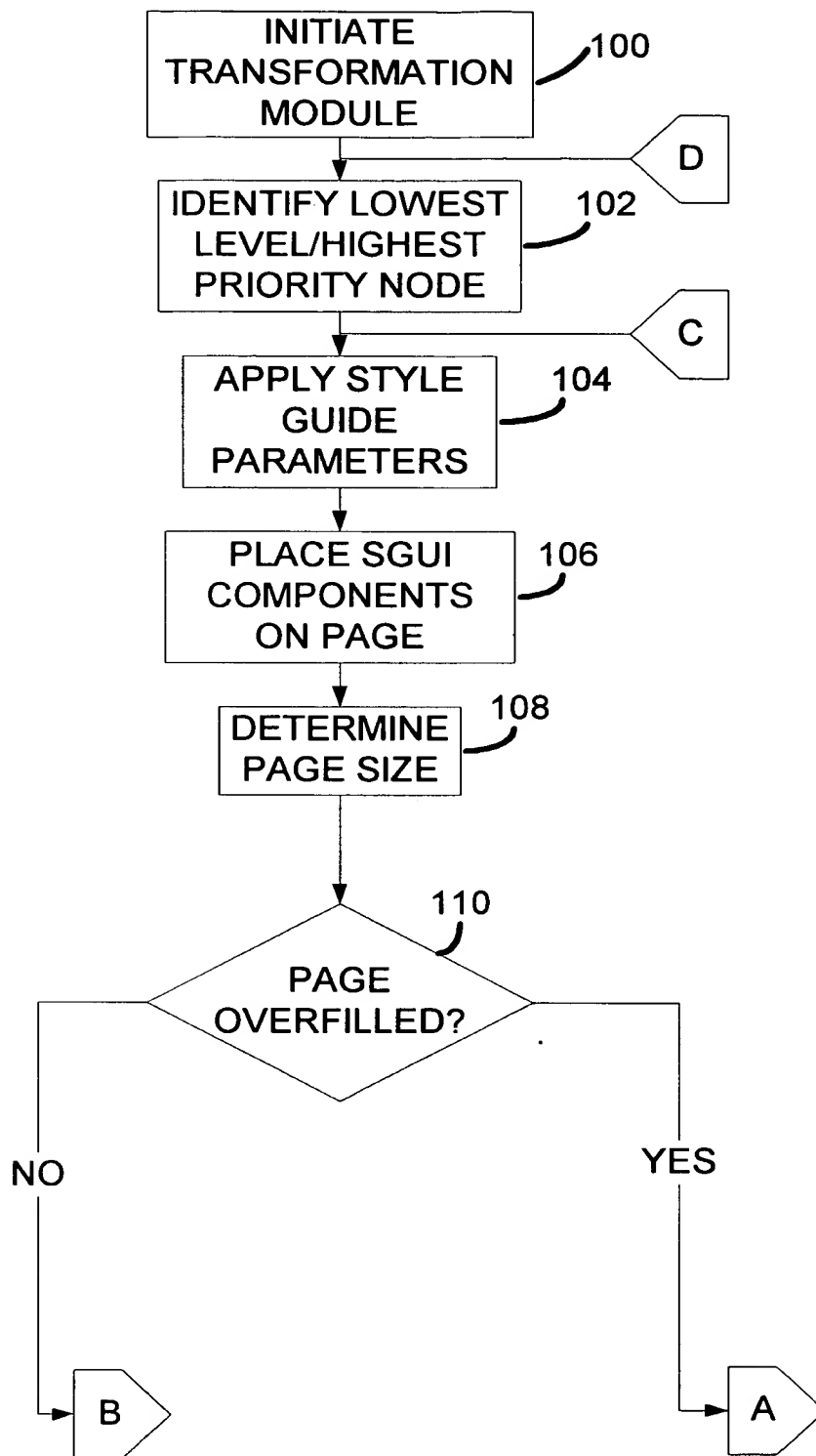


FIG. 7

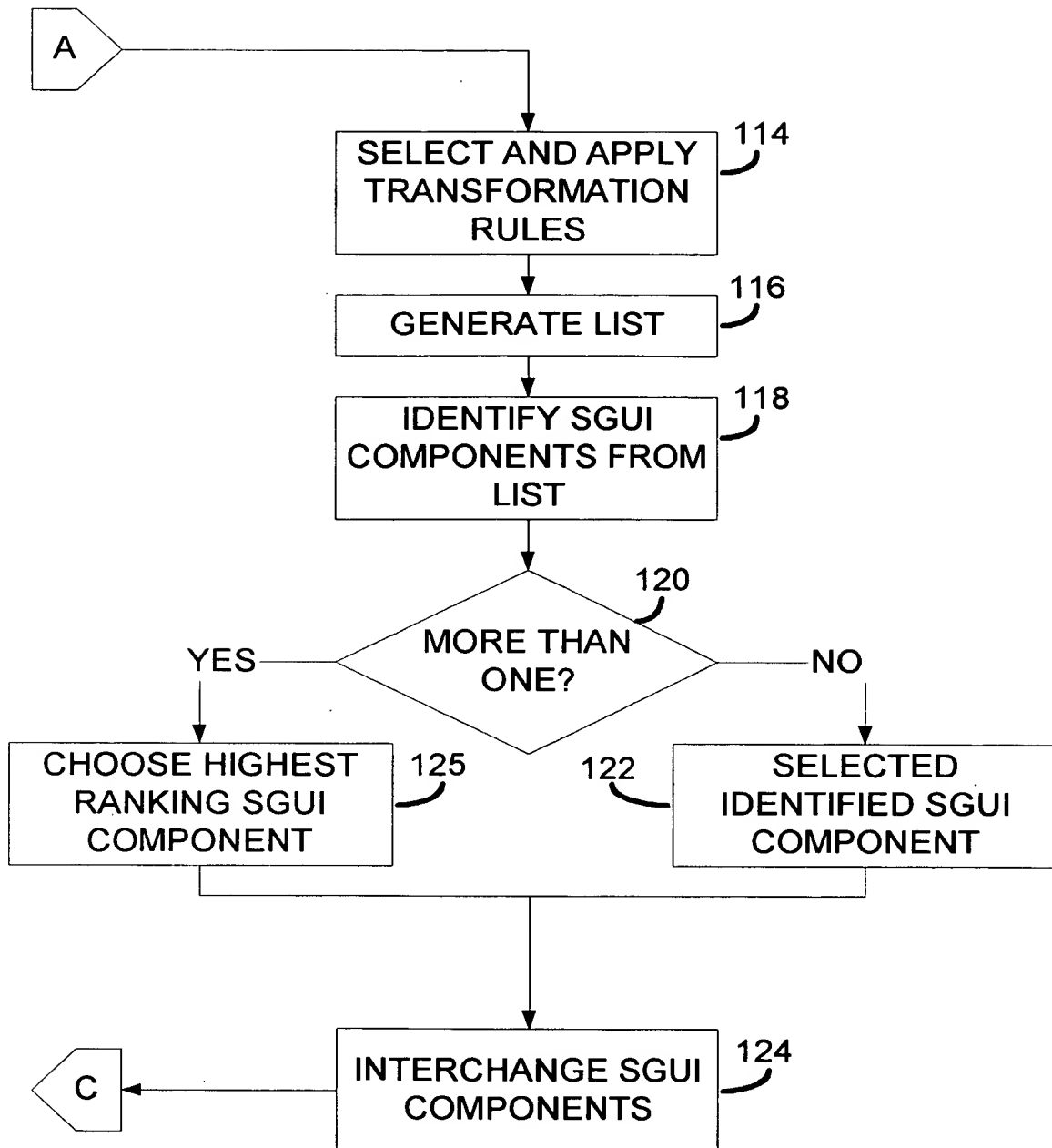


FIG.8

```

graph TD
    B{{B}} --> 126{PAGE UNDERFILLED?}
    126 -- YES --> 128{SIBLING NODES LAID OUT?}
    126 -- NO --> 146[PAGE SUBST. FULL]
    146 --> 148[ALLOCATE NEW PAGE]
    148 --> 134{MORE LOWEST LEVEL NODES?}
    128 -- NO --> 144[SELECT HIGHEST PRIORITY NODE]
    144 --> C1{{C}}
    128 -- YES --> 130[IDENTIFY RELATED NODE FROM NEXT HIGHEST LEVEL]
    130 --> 132{ROOT CONTAINER NODE?}
    132 -- YES --> 134
    132 -- NO --> 138{PREVIOUSLY LAID OUT?}
    138 -- YES --> 140{OTHER SIBLINGS LAID OUT?}
    138 -- NO --> C2{{C}}
    140 -- YES --> 134
    140 -- NO --> 142[SELECT SIBLING NODE]
    142 --> C3{{C}}
    134 -- YES --> D{{D}}
    134 -- NO --> END[END]

```

FIG. 9

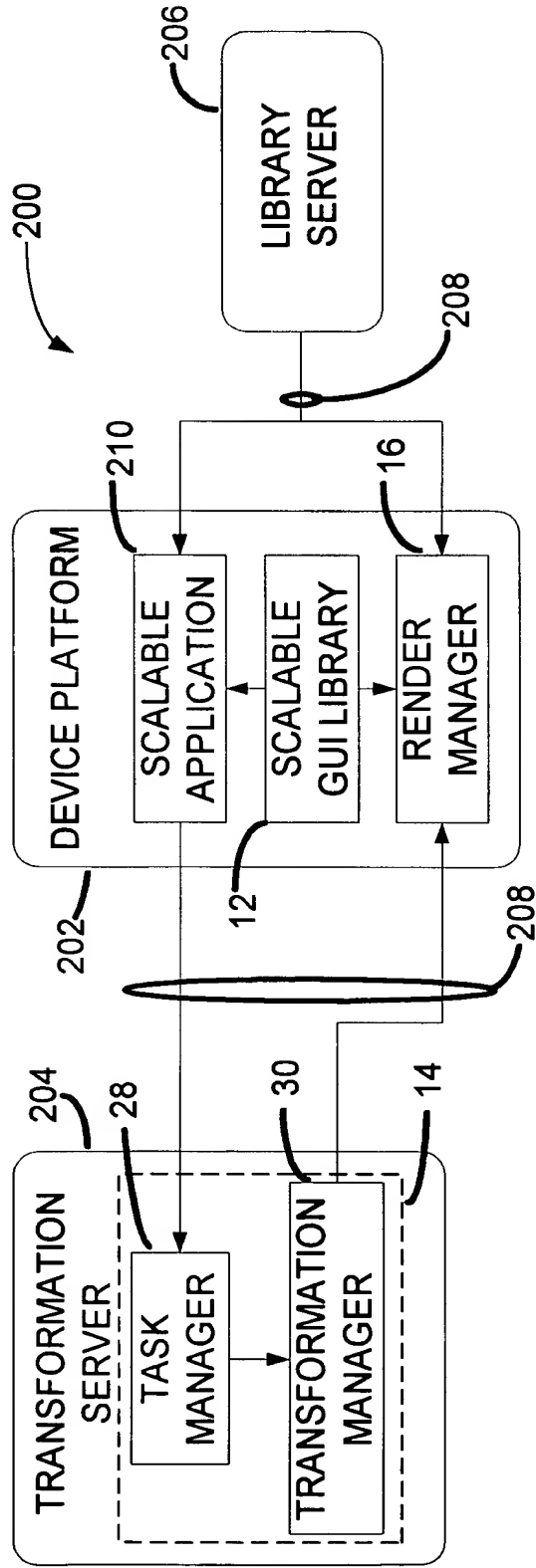


FIG. 10

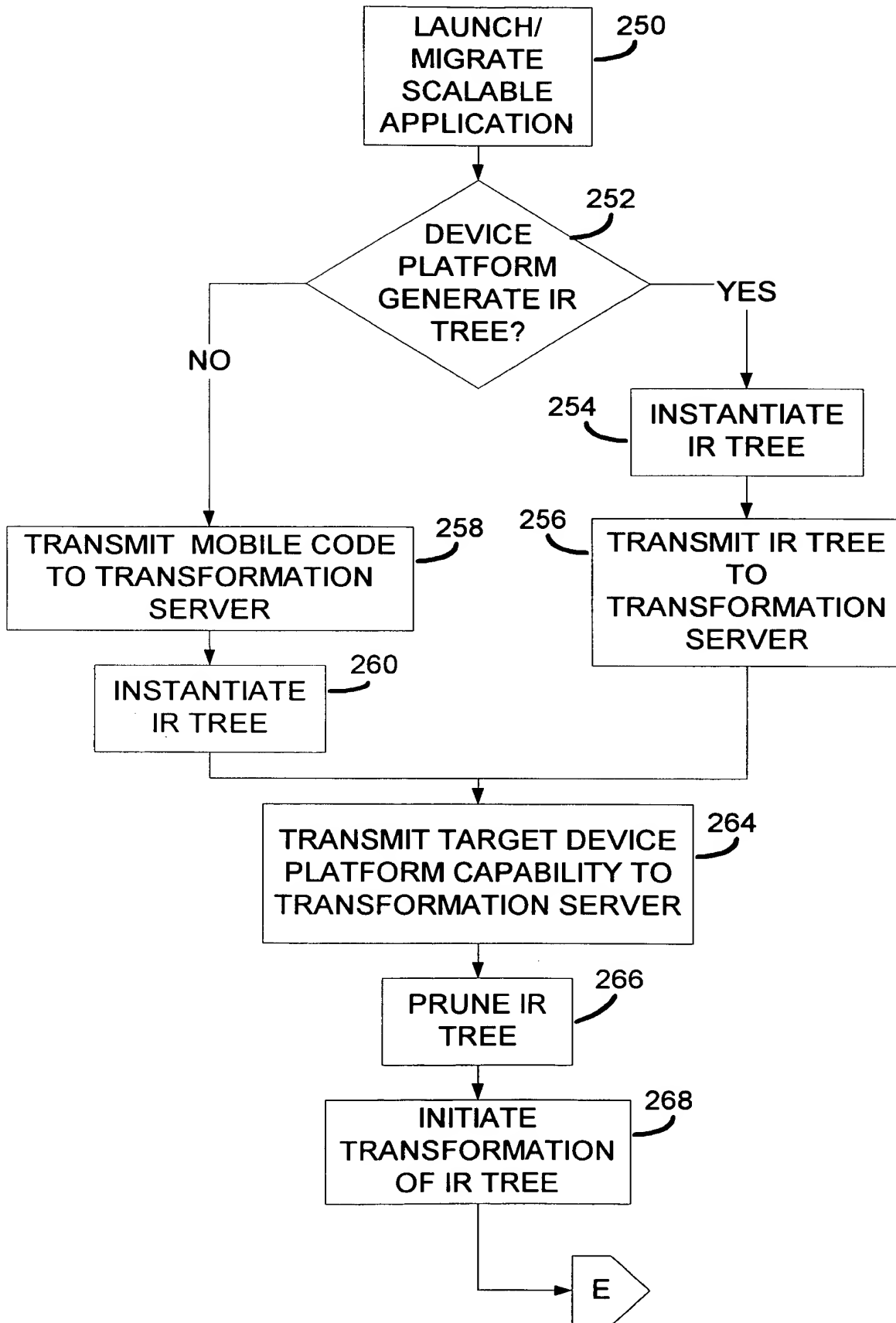


FIG. 11

0966135-092801
108260-5819660

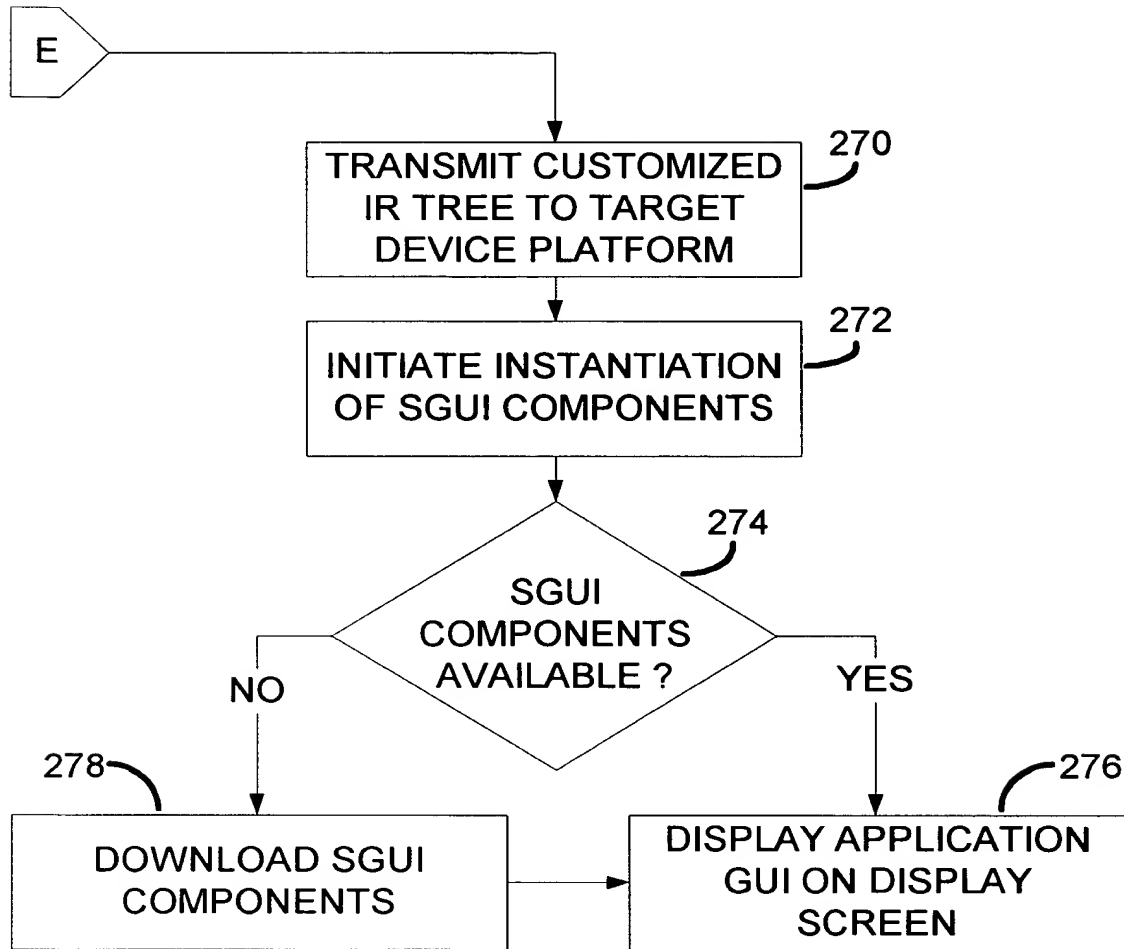


FIG. 12